REMARKS

Enclosed herein is a copy of the references cited in the IDS, which was submitted on December 12, 2001.

The specification has been amended to correct informalities. No new matter has been added by the current amendment.

Double Patenting Rejections

The Examiner has provisionally rejected claims 1 through 21 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims of 1 through 18 of copending application No 09/994,951. The Examiner stated that the following portion from a pending claim of copending application No 09/994,951 is lacking in pending claim 1 of the current application.

> displaying a portion of the multidimensional database that is corresponding to the selected one of the characteristic rules, the displayed portion being organized in rows and columns to define cells based upon the condition items of the selected one of the characteristic rules, the cells each having a value for the analysis dimension;
> modifying the condition items;
> displaying another portion of the multidimensional database that is corresponding to the modified condition items;

The above claim language allows the user to modify "the condition items" based upon the displayed "portion of the multidimensional database" in order to further refine the ultimate output of "the speculation results." Without the above quoted steps of "displaying," "modifying" and "displaying," the ultimate "speculation results" are determined based upon the selection of "the characteristic rules."

Furthermore, pending claim 1 of the current application explicitly recites the following additional step that is not included in claim 1 of copending application No 09/994,951.

selecting one of the speculation models.

The above step additionally allows the user to select the "speculation model" to generate "the speculation results." This patentable feature is recited in pending claim 1 of copending application No 09/994,951.

Since the Examiner has not provided the Applicant with any other references, the Applicant respectfully submits to the Examiner that the above difference as explicitly recited in independent claim 1 is patentably distinct from pending claim 1 of copending application No 09/994,951. Similarly, the Examiner has reasoned the rejections of claims 8 and 15 based upon the same rejection basis. Thus, the Applicants respectfully traverse the rejections of claims 1, 8 and 15 under the judicially created doctrine of obviousness-type double patenting.

Furthermore, dependent claims 2 through 3, 5 through 7, 9, 10, 12 through 14, 16, 17 and 19 through 21 ultimately depend from independent claim 1, 8 or 15 and incorporate the above patentable features of the current invention. Dependent claims 4, 11 and 18 have been rewritten into an independent form to respectively incorporate the original subject matter limitations and the corresponding independent claims 1, 8 and 15. Therefore, the Applicants respectfully submit to the Examiner that the rejections of claims 1 through 21 under the judicially created doctrine of obviousness-type double patenting should be withdrawn.

The Section 103 Rejections

The Examiner has rejected claims 1, 2, 4, 6 through 9, 11, 13 through 16, 18, 20 and 21 under 35 U.S.C. §103 as allegedly being obvious over Iwamoto et al., Malloy et al. and Basch et al. The Examiner has allegedly pointed out that Iwamoto discloses a data mining apparatus and storage medium storing data mining processing program performing the steps recited in

independent claim 1. Although the Examiner has conceded that Iwamoto does not disclose or teach the generation of multidimensional database, she has cited Malloy for allegedly disclosing a multidimensional database in the context of Iwamoto. The Examiner has further conceded that Molloy does not teach or disclose a selected segment speculation data list. For the lack of the disclosure, the Examiner has cited Basch for allegedly disclosing a speculation data list and a selection segment of the speculation data list. Thus, the Examiner has concluded that it would have been obvious to one of ordinary skill in the art to provide the claimed invention based upon the combined disclosures of the above three cited references.

Newly amended independent claims 1 and 15 each explicitly recite "selecting one of the characteristic rules via a predetermined user-interface…selecting one of the speculation models via the predetermined user-interface…." Similarly, newly amended independent claim 8 explicitly recites "a user interface unit . . . for providing a predetermined user-interface for selecting one of the characteristic rules and one of speculation models…." In other words, the user selects "one of the characteristic rules" and then "one of speculation models" both through "the predetermined user-interface."

Furthermore, newly amended independent claims 1 and 15 each explicitly recite "generating speculation results based upon the selected one of the speculation models and the speculation data list." Similarly, newly amended independent claim 8 further explicitly recites "the speculation processing unit outputting speculation results based upon the selected one of the speculation models and the speculation data list."

Iwamoto improves a technique for displaying tree diagrams by simplifying the structure, highlighting certain aspects based upon color and shapes, sorting the diagrams as well as limiting an amount of data to be processed. (lines 44 through 56, column 3; lines 25 through 28, column 4; lines 35 through 40, column 4; lines 58 through 61, column 3). The user specifies an analyzing request to extract a specific analysis item as a filter from the analytical dictionary. As a result, a sum result in a format of an analysis sheet is outputted for a display. (line 54, column

7 through line 17, column 8). Subsequently, the user issues a mining analyzing request to perform a data mining process on the analysis sheet. Iwamoto fails to disclose the selection of "the speculation models" after "one of the characteristic rules" has been selected via "the predetermined user-interface."

Malloy et al. discloses a technique for implementing multi-dimensional database analysis or on-line analytical processing (OLAP) systems that utilizes relational database management system (RDBMS) as storage managers. In other words, Malloy et al. disclose a technique for the relational database 118 to "emulate a multi-dimensional database 300." Although Malloy discloses a technique to access the multi-dimensional data, Malloy et al. fails to disclose a user-interface to select "one of the characteristic rules" and to further select one of "the speculation models" both through "the predetermined user-interface."

Bach et al. discloses a technique for predicting a financial risk to the account issuers and or account holders. Bach et al. discloses a financial risk prediction system (FRPS) 100 based upon on-line analytical processing (OLAP) to process various sources of account-related data. In one preferred embodiment, neural network methodologies are used to create predictive models based upon the current and past account-related data. In another preferred embodiment, other statistical techniques such as decision tree, linear regression, logical regression and fuzzy sets are used to create predictive rules. (line 52 through 55, column 11). Ultimately, the financial risk scores are delivered to entities such as account issuers and other data consumers who are interested in the financial risk of a particular account and or account holder. Bach et al. fails to disclose that the user selects "one of the characteristic rules" and further selects "one of the speculation models" both through "the predetermined user-interface."

Even though the above three references are combined as the Examiner has alleged, the combined disclosures still fail to teach, disclose or suggest that the user selects "one of the characteristic rules" and "one of the speculation models" both through "the predetermined user-interface." The claimed invention as explicitly recited in newly amended independent claims

allows the user to select "one of the characteristic rules" and subsequently further select "a speculation model" while it allows the user to view "the extracted and selected segment." Lastly, the claimed invention as explicitly recited in newly amended independent claims outputs "speculation results based upon the selected one of the speculation models and the speculation data list." Thus, it would not have been obvious to one of ordinary skill in the art to provided the 3 above explicitly recited patentable features of the current invention based upon the three cited references alone or in combination.
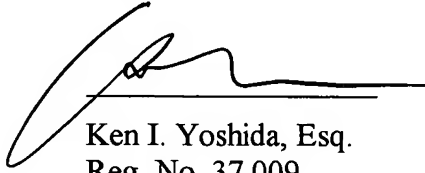
Dependent claims 2, 3, 5 through 7, 9, 10, 12 through 14, 16, 17 and 19 through 21 ultimately depend from one of the newly amended independent claim 1, 8 or 15 and incorporate the above described patentable feature of the independent claim. Dependent claims 4, 11 and 18 have been rewritten into an independent form to respectively incorporate the original subject matter limitations and the corresponding independent claims 1, 8 and 15. Therefore, the Applicants respectfully submit to the Examiner that the rejections of the claims under 35 U.S.C. §103 should be withdrawn.

Finally, the claim amendments in the current response are supported by the original disclosures of the current application, and no new matter has been added by the claims amendment.

<u>Conclusion</u>

In view of the above amendments and the foregoing remarks, Applicant respectfully submits that all of the pending claims are in condition for allowance and respectfully request a favorable Office Action so indicating.

Respectfully submitted,

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